



RNase Inhibitor, Murine

Manual

Catalog #	3712	3714
Package Size	5,000 units	20,000 units
Concentration	40 units/ μ l	



Important!

-20°C Storage Required

- * Immediately inspect packages
- * Freeze upon receipt



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Intact Genomics, Inc.

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Description:

RNase inhibitors are commonly used to inhibit and control RNase contaminants in enzymatic manipulations of RNA. Intact Genomics (ig®) RNase Inhibitor is a 49.8 KDa recombinant protein of murine origin which specifically inhibits RNases A, B and C by binding noncovalently in a 1:1 ratio with high affinity. Moreover, it does not inhibit polymerase activity when used with *Taq* DNA Polymerase, Reverse Transcriptase. RNase Inhibitor from Murine is resistance to oxidation compared to the human/porcine RNase inhibitors as it lacks the pair of cysteines found in the human/porcine versions. In addition, it is stable at less than 1 mM DTT concentration.

Protein Purity:

The physical purity of this enzyme is $\geq 98\%$ as assessed by SDS-PAGE with Coomassie® blue staining (see figure below).

Protein Source:

E. coli strain expressing recombinant RNase Inhibitor gene from mouse.

Applications:

- cDNA synthesis
- RT-PCR/RT-qPCR
- *In vitro* transcription/translation
- RNA labeling



RNase Inhibitor (RI)

Product Components & Storage:

- RNase Inhibitor, Murine: -20°C
- 50 mM Tris-HCl, 50 mM KCl, 1 mM DTT, 0.1 mM EDTA 50% Glycerol, pH 7.5 @ 25°C

Heat Inactivation:

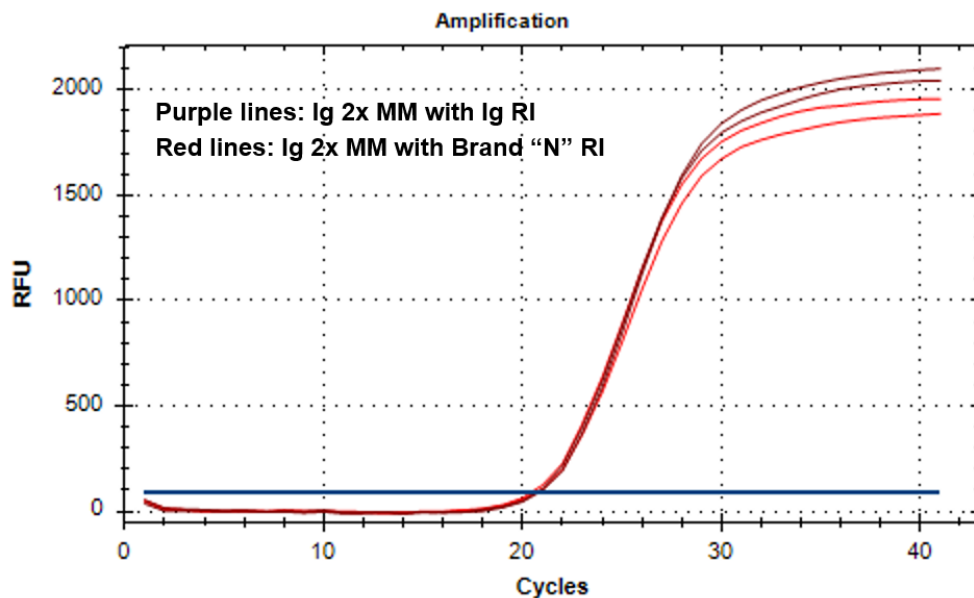
70°C for 20 minutes

Unit Definition:

One unit is defined as the amount of RNase Inhibitor is required to inhibit the activity of 5 ng of RNase A by 50%.

Quality Control:

SDS-PAGE purity, protein concentration, endodeoxyribonuclease assay, performance evaluation with RT-qPCR.



RNase Inhibitor (RI) Data Comparison:

RT-qPCR was run using Intact Genomics (IG) 1-step 2x master mix (MM) and compared IG RI with a leading brand's "N" RI.

Related Products:

- igScript™ Probe-Based One Step RT-qPCR Kit (Cat.# 3212)
- ig® SYBR Green qPCR 2x Master Mix (Cat.# 3354)
- *Taq* DNA Polymerase 2x Premix (Cat.# 3249)
- ig® 5-alpha Chemically Competent Cells (Cat.# 1031-12)
- igScript™ Reverse Transcriptase (Cat.# 3344)
- igScript™ Probe-Based One Step RT-qPCR Kit (Cat.# 4212)

Ordering Information:

- Order online within the USA. Place orders on **www.intactgenomics.com** using our secure Shopping Cart.
- Order by email, phone, or fax.
Email: **sales@intactgenomics.com**
Phone: (314) 942-3655 | Toll-free : 855-835-7172 | Fax: (314) 942-3656
- Order via our distributors.

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Product Use Limitation and Disclaimers

This product is for research purposes only. It is not intended for therapeutic or diagnostic purposes in humans or animals. This product contains chemicals which may be harmful if misused or direct human contact is made.

Intact Genomics is dedicated to practicing and maintaining science and technology ethics. Buyer agrees to use the purchased materials in full compliance with applicable law and regulations.

Technical Support & Customer Services

Intact Genomics (IG®) is dedicated to customer satisfaction regarding the use of our products for your research needs. Each new lot of our products is thoroughly tested to ensure it meets high quality standards and provides excellent results. We appreciate your business and your feedback regarding the performance of our products in your applications. Please follow the instructions carefully and contact us if additional assistance is needed.

Our hours are Monday - Friday, 8AM to 5PM, U.S. Central Standard Time.

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